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EXAMINER

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ART UNIT PAPER NUMBER

3626

DATE MAILED: 07/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
08/879,070

Applicant(s)
Johnson et al

Examiner
Alexander Kalinowski

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Apr 19, 2003.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

Recent Statutory Changes to 35 U.S.C. § 102(e)

On November 2, 2002, President Bush signed the 21st Century Department of Justice Appropriations Authorization Act (H.R. 2215) (Pub. L. 107-273, 116 Stat. 1758 (2002)), which further amended 35 U.S.C. § 102(e), as revised by the American Inventors Protection Act of 1999 (AIPA) (Pub. L. 106-113, 113 Stat. 1501 (1999)). The revised provisions in 35 U.S.C. § 102(e) are completely retroactive and effective immediately for all applications being examined or patents being reexamined. Until all of the Office's automated systems are updated to reflect the revised statute, citation to the revised statute in Office actions is provided by this attachment. This attachment also substitutes for any citation of the text of 35 U.S.C. § 102(e), if made, in the attached Office action.

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 in view of the AIPA and H.R. 2215 that forms the basis for the rejections under this section made in the attached Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

35 U.S.C. § 102(e), as revised by the AIPA and H.R. 2215, applies to all qualifying references, except when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. For such patents, the prior art date is determined under 35 U.S.C. § 102(e) as it existed prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. § 102(e)).

The following is a quotation of the appropriate paragraph of 35 U.S.C. § 102 prior to the amendment by the AIPA that forms the basis for the rejections under this section made in the attached Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

For more information on revised 35 U.S.C. § 102(e) visit the USPTO website at www.uspto.gov or call the Office of Patent Legal Administration at (703) 305-1622.

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DETAILED ACTION

1. Claims 1-10 are presented for examination. Claims 1-10 were originally filed on 6/19/97. On 5/20/99, Applicants filed a request for reconsideration of the grounds of rejection established in the prior office action (Paper No. 6). Applicants further amended claims 1-3 and 8-10 by amendment filed on 11/13/99. Applicants further filed a continuing patent application on 7/19/2000 amending claims 1 and 8-10. Applicant further filed an amendment on 3/2/2001 amending claims 1 and 8-10. In addition, Applicant filed an amendment on 11/8/2001 amending claims 1 and 8-10. Applicant filed a request for reconsideration on 4/19/2003. After careful consideration of Applicant's arguments, the Examiner finds Applicant's arguments nonpersuasive and maintains the rejection of claims 1-7 based on 35 USC 103. However, the Examiner finds Applicant's arguments directed to claims 8-10 persuasive. New grounds of rejection are established for claims 8-10 based on 35 USC 103. The instant action is a non-final rejection of claims 1-10 as set forth in detail below..

Response to Arguments

2. Applicant's arguments filed on 4/19/2003 have been fully considered but they are not persuasive.

3. With respect to claims 1 and 8-10, Applicant argues that the combination of references does not teach "a computer system that identifies one or more alternative products "that correspond to a buildable product" when a product that corresponds to the requested product is

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not found". Specifically, Applicant states the references fail to disclose or suggest "a process for determining alternate configured products" (see Paper No. 27, page 2). The Examiner disagrees. Applicant acknowledges that Dworkin, SFA and Bennett teach a systems related to configuring a system based on user inputs (Paper No. 27, page 2). Applicant also acknowledges that Dworkin, SFA and Bennett discloses "the sale of an item which uniquely configured to satisfy the particular needs of a customer as expressed by the set of inputs" (Paper No. 27, page 2). The SFA reference discloses a software product called GM PROSPEC that was used to configure and price vehicles (page 1, lines 36-42). The reference discloses that product configurator has virtually eliminated the factory reject rate that was associated with manual orders (page 1, lines 27-42). SFA further discloses the factory reject rate represented orders which were ultimately rejected because they were unbuildable. At the very least, SFA suggests that the product configurator called GM PROSPEC checks to see if the product is buildable. Furthermore, SFA discloses systems that perform next-best alternatives processes (page 3, lines 24-27). At the very least, SFA suggests that the systems on the market have a process for determining alternate configured products (i.e. next best alternatives). In addition, the Examiners use of the Joseph reference was limited to showing a system that determines if a selected product is found in stock and if the selected item is not found in stock, then if alternative products are available in stock. The Examiner did not use the Joseph reference to disclose a system for providing a configurable item. Therefore, the SFA reference discloses a process for determining alternate configured products and Applicant's arguments directed to this feature are deemed nonpersuasive.

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4. With respect to claims 1 and 8-10, Applicant also argues that there is no motivation to combine the Dworkin, SFA, Joseph, and Bennett references and that the Office Action failed to suggest any motivation to combine the references. The Examiner disagrees. The Examiner notes that motivation to combine the references was explicitly recited in the office action for the rejection of claims 1 and 8-10. Furthermore, motivation to combine the references was cited directly from the references. Therefore, Applicant's arguments directed to the failure to cite motivation to combine the Dworkin, SFA, Joseph, and Bennett references is deemed nonpersuasive.

5. With respect to claims 1 and 8-10, Applicant argues that the teachings of Dworkin, SFA, and Bennett "contemplate the sale of an item which is to be configured, or built, to exactly satisfy the particular requirements, as provided by user" and the Joseph discloses a system for suggesting "an alternate pair of shoes or similar items that are not buildable or configurable" and as such the process and system contemplated by Joseph are fundamentally divergent from the Dworkin, SFA, and Bennett references and therefore teach away from each other and render each set of prior art unsatisfactory. The Examiner disagrees. Applicant's characterization of the teachings of Dworkin, SFA and Bennet is not accurate. As explained in paragraph 3 above, SFA discloses systems on the market have a process for determining alternate configured products (i.e. next best alternatives)(page 3, lines 24-27). SFA does not just contemplate the sale of an item which is to be configured, or built, to exactly satisfy the particular requirements, as provided by user but also contemplates a process for determining alternate configured products. Furthermore, as explained

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above in paragraph 3, the Examiners use of the Joseph reference was limited to showing a system that determines if a selected product is found in stock and if the selected item is not found in stock, then if alternative products are available in stock. Motivation to combine the teachings of the references were cited directly from the references. Therefore, the references are not divergent and Applicant's arguments directed to the motivation to combine the references is deemed nonpersuasive.

6. With respect to claims 8-10, Applicant argues that Dworkin, SFA, Bennett and Joseph do not disclose one or more alternative products "that most closely satisfy the customer's intended use of the product". Applicant's argument is deemed persuasive and new grounds of rejection of claims 8-10 are established in the instant office action.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 2 and 8-10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dworkin Pat. No. 4,992,940, (hereinafter Dworkin) in view of "Sales-force automation comes of age.(includes related articles on how Hewlett-Packard Co. Computer Systems Group

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implemented technology-enabled selling applications)(hereinafter SFA), Joseph. Pat. No. 5,878,401 (hereinafter Joseph) and Bennett et al., Pat. No. 4,591,983 (hereinafter Bennett).

a. With respect to claim 1, Dworkin discloses

A computer system implemented method for facilitating a sale of a product from an inventory of a selling entity, the computer system including a memory arrangement and at least one processing unit coupled to the memory arrangement; column 3, lines 48 through 64; the method comprising the steps of:

storing in the memory arrangement product inventory information related to the inventory of the selling entity; column 3, lines 60 through 66 and column 7, lines 54 through 61;

obtaining information regarding a customer's needs related to the selling entity products; column 5, lines 43 through 68; and

Dworkin does not explicitly disclose

storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity; and

interactively selecting one or more product options to define a configured product which satisfies the customer's needs using the stored configuration information to constrain selection of the product options.

However, SFA discloses an automated system (i.e. GM PROSPEC) to configure products to suit buyers' needs (see abstract and page 1). SFA discloses storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity

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(i.e. online marketing encyclopedia) (page 3, lines 4-6 and lines 18-23). Furthermore, SFA discloses presenting product options to a user of the computer system for selection by the user to define a configured product which satisfies the customer's needs using the stored configuration information to constrain selection of the product options (i.e. product configurator) (page 3, lines 7-11 and lines 24-29). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity and presenting product options to a user of the computer system for selection by the user to define a configured product which satisfies the customer's needs using the stored configuration information to constrain selection of the product options as disclosed by SFA within the system disclosed by Dworkin in order to permit salespeople to configure products to suit the buyers' needs in an efficient manner and maximize the salesperson's time with the customer thereby increasing profitability (abstract and page 1, line 43 - page 2, line 4).

Dworkin and SFA do not explicitly disclose

identifying from the inventory of the selling entity, using the stored inventory information, one or more available products which exactly corresponds to the configured product when an identified available product that exactly corresponds to the configured product is not found in the stored inventory information, identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product based upon a combination of values associated with the user-selectable options.

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However, Joseph discloses a computer based system for identifying from the inventory of the selling entity, using the stored inventory information, one or more available products which exactly corresponds to the configured product when an identified available product that exactly corresponds to the configured product is not found in the stored inventory information, identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product (i.e. determining the availability of the requested item, determining alternative items for the requested item if the requested item is unavailable and determining alternative items for the requested items that are available)(col. 2, lines 28-43). Furthermore, Joseph discloses identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product based upon a combination of values associated with the user-selectable options (i.e. categorized by price and product description)(col. 5, lines 1-41). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the teachings of Joseph within the Dworkin and SFA combination for the motivation of permitting customers an alternative to out of stock product selections to avoid customer dissatisfaction (col. 1, lines 35-40).

Dworkin, SFA and Joseph do not explicitly disclose

- a list of user selectable options

- wherein the interactively selecting one or more user-selectable options comprises:

- identifying the product option interactively selected;

- retrieving the configuration rules associated with the selected product option;

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applying the configuration rules to the configurable product; and

altering the list of user-selectable options used to interactively configure a product based upon the configuration rules and the inventory available.

However, Bennett discloses a computer implemented method for a user generating a product configuration including item constraints (see abstract). Bennett discloses displaying and interactively selecting product options from a list of user selectable options (i.e. the knowledge based configuration system has a catalog of parts and components which implement those functions. Order lines include additional or optional features requested by the customer)(col. 4, lines 4-16, col. 11, lines 1-11). Bennett also discloses identifying the product option interactively selected (i.e. order lines)(col. 11, lines 1-16). Bennett further discloses retrieving the configuration rules associated with the selected product option and applying the configuration rules to the configurable product (i.e. the configuration system applies the assembly constraints during configuration checking)(col. 4, lines 4-16, col. 11, lines 26-34). Finally, Bennett discloses altering the list of user-selectable options used to interactively configure a product based upon the configuration rules and the inventory available (i.e. the configuration system warns the user or modifies the given set of components to insure compliance with the assembly constraints)(col. 4, lines 12-16, col. 24, lines 28-45 and col. 27, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the features associated with interactively selecting product options within the Dworkin, SFA and Joseph combination in order

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to fill a customers needs in an efficient manner by flexibly assembling a product to match a customer's needs (col. 1, lines 21-24).

b. With respect to claim 2, Dworkin does not explicitly disclose a method as recited in claim 1, further comprising ranking the selected product options according to a value of the product options to the customer and, using the ranking to identify available and buildable products in inventory corresponding to the configured product.

However, Dworkin does disclose accepting desired specifications from a user in a variety of ways, not all of which are disclosed in the patent. Column 5, lines 55 through 68. The Examiner takes official notice that it was well known in the art at the time to rank the relative importance of options or attributes to customers. It would have been obvious to one of ordinary skill in the art at the time of Applicants invention to include ranking the relative importance of options or attributes to customers in the combined Dworkin/SFA/Joseph/Bennett method, as discussed above in connection with claim 1 in order to rank the relative importance of various options of a custom configured system to him and to identify products meeting the highest ranked requirements.

c. With respect to claim 8, Dworkin discloses a computer system implemented method for facilitating a sale of a product from an inventory of a selling entity, the computer system including a memory arrangement and at least

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one processing unit coupled to the memory arrangement; column 3, lines 48 through 64; the method comprising the steps of:

storing in the memory arrangement product inventory information related to the inventory of the selling entity; column 3, lines 60 through 66 and column 7, lines 54 through 61; and

obtaining information regarding a customer's needs related to the selling entity products; column 5, lines 43 through 68.

Dworkin does not explicitly disclose

storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity

However, SFA discloses an automated system (i.e. GM PROSPEC) to configure products to suit buyers' needs (see abstract and page 1). SFA also discloses storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity (i.e. online marketing encyclopedia) (page 3, lines 4-6 and lines 18-23). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity as disclosed by SFA within the system disclosed by Dworkin in order to permit salespeople to configure products to suit the buyers' needs in an efficient manner and maximize the salesperson's time with the customer thereby increasing profitability (abstract and page 1, line 43 - page 2, line 4).

Dworkin does not explicitly disclose

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interactively selecting product options to define a sellable product which satisfies the customer's needs using the stored configuration rules and the stored product inventory information to constrain selection of the product options to product options available in the available inventory of the selling entity.

However, Dworkin discloses identifying from the inventory of the selling entity, using the stored inventory information, one or more available products which most closely correspond to the configured product; see Fig. 7, column 6, lines 11 through 15 and column 7, lines 54 through 61. SFA discloses interactively selecting product options to define a sellable product which satisfies the customer's needs using the stored configuration rules to constrain selection of the product options to product options available (i.e. virtually eliminated the factory reject rate) in the available inventory of the selling entity (page 1, lines 22-40, page 3, lines 7-11 and lines 18-29). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include presenting product options to a user of the computer system for selection by the user to define a configured product which satisfies the customer's needs using the stored configuration information to constrain selection of the product options to product options in the as disclosed by SFA within the Dworkin system in order to permit salespeople to configure products to suit the buyers' needs in an efficient manner (i.e. present custom products that can be built by the seller) and maximize the salesperson's time with the customer thereby increasing profitability (abstract and page 1, line 43 - page 2, line 4).

Neither Dworkin nor SFA explicitly disclose

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obtaining information regarding a customer's intended uses of a product to be purchased; assigning a corresponding value to each of the customer's uses depending on an importance of the use to the customer; and

identifying, using the stored inventory information and the obtained information regarding the customer's intended uses and corresponding value, one or more products which are in the available inventory of the selling entity and which most closely satisfy the customer's intended use of the product.

However, Dworkin discloses obtaining information regarding a customer's need in terms of minimum specifications of a product, column 5, lines 43 through 68. The Examiner takes official notice that it was well known in the sales art at the time of Applicant's invention to gather minimum specifications of products by asking questions regarding intended use. in lieu of asking questions regarding technical specifications, particularly in the case of a less sophisticated customer (e.g., asking the customer whether a printer was to be used as a high capacity printer for business purposes or as a low capacity printer for home purposes in lieu of asking whether a laser or ink jet printer was desired).

The Examiner takes official notice that it was well known in the art at the time to assign a value to each factor or feature of a configuration depending on the importance of the factor or feature to the customer. It would have been obvious to one of ordinary skill in the art at the time to assign such a value to each intended use when soliciting requirements in the form of intended

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uses within the Dworkin system in order to be able to determine the most important requirements of the customer.

Dworkin and SFA do not explicitly disclose

identifying from the inventory of the selling entity, using the stored inventory information, one or more available products which exactly corresponds to the configured product when an identified available product that exactly corresponds to the configured product is not found in the stored inventory information, identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product based upon a combination of values associated with the user-selectable options.

However, Joseph discloses a computer based system for identifying from the inventory of the selling entity, using the stored inventory information, one or more available products which exactly corresponds to the configured product when an identified available product that exactly corresponds to the configured product is not found in the stored inventory information, identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product (i.e. determining the availability of the requested item, determining alternative items for the requested item if the requested item is unavailable and determining alternative items for the requested items that are available)(col. 2, lines 28-43). Furthermore, Joseph discloses identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product based upon a combination of values associated with the user-selectable options (i.e. categorized by price and product

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description)(col. 5, lines 1-41). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the teachings of Joseph within the Dworkin and SFA combination for the motivation of permitting customers an alternative to out of stock product selections to avoid customer dissatisfaction (col. 1, lines 35-40.

Dworkin does not explicitly disclose

- a list of user selectable options

- wherein the interactively selecting one or more user-selectable options comprises:

- identifying the product option interactively selected;

- retrieving the configuration rules associated with the selected product option;

- applying the configuration rules to the configurable product; and

- altering the list of user-selectable options used to interactively configure a product based upon the configuration rules and the inventory available.

However, Bennett discloses a computer implemented method for a user generating a product configuration including item constraints (see abstract). Bennett discloses displaying and interactively selecting product options from a list of user selectable options (i.e. the knowledge based configuration system has a catalog of parts and components which implement those functions. Order lines include additional or optional features requested by the customer)(col. 4, lines 4-16, col. 11, lines 1-11). Bennett also discloses identifying the product option interactively selected (i.e. order lines)(col. 11, lines 1-16). Bennett further discloses retrieving the configuration rules associated with the selected product option and applying the configuration

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rules to the configurable product (i.e. the configuration system applies the assembly constraints during configuration checking)(col. 4, lines 4-16, col. 11, lines 26-34). Finally, Bennett discloses altering the list of user-selectable options used to interactively configure a product based upon the configuration rules and the inventory available (i.e. the configuration system warns the user or modifies the given set of components to insure compliance with the assembly constraints)(col. 4, lines 12-16, col. 24, lines 28-45 and col. 27, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the features associated with interactively selecting product options within the Dworkin, SFA and Joseph combination in order to fill a customers needs in an efficient manner by flexibly assembling a product to match a customer's needs (col. 1, lines 21-24).

d. With respect to claim 9, Dworkin discloses a computer system implemented method for facilitating a sale of a product from an inventory of a selling entity, the computer system including a memory arrangement and at least one processing unit coupled to the memory arrangement; column 3, lines 48 through 64; the method comprising the steps of:

storing in the memory arrangement product inventory information related to the inventory of the selling entity; column 3, lines 60 through 66 and column 7, lines 54 through 61;

obtaining information regarding a customer's needs related to the selling entity products; column 5, lines 43 through 68; and

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providing an indication to the user of the computer system, based on the stored inventory information, of whether selection of a particular presented product option, if incorporated into the configured product, would preclude obtaining the product from the inventory of the selling entity(i.e. product availability); see Fig. 7, column 6, lines 11 through 15 and column 7, lines 54-61.

Dworkin does not explicitly disclose

storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity; and

presenting product options to a user of the computer system for selection by the user to define a configured product which satisfies the customer's needs using the stored configuration information to constrain selection of the product options.

However, SFA discloses an automated system (i.e. GM PROSPEC) to configure products to suit buyers' needs(see abstract and page 1). SFA discloses storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity (i.e. online marketing encyclopedia) (page 3, lines 4-6 and lines 18-23). Furthermore, SFA discloses presenting product options to a user of the computer system for selection by the user to define a configured product which satisfies the customer's needs using the stored configuration information to constrain selection of the product options (i.e. product configurator) (page 3, lines 7-11 and lines 24-29). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include storing in the memory arrangement configuration information

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related to selling entity products offered for sale by the selling entity and presenting product options to a user of the computer system for selection by the user to define a configured product which satisfies the customer's needs using the stored configuration information to constrain selection of the product options as disclosed by SFA within the system disclosed by Dworkin in order to permit salespeople to configure products to suit the buyers' needs in an efficient manner and maximize the salesperson's time with the customer thereby increasing profitability (abstract and page 1, line 43 - page 2, line 4).

Neither Dworkin nor SFA explicitly disclose

obtaining information regarding a customer's intended uses of a product to be purchased; assigning a corresponding value to each of the customer's uses depending on an importance of the use to the customer; and

identifying, using the stored inventory information and the obtained information regarding the customer's intended uses and corresponding value, one or more products which are in the available inventory of the selling entity and which most closely satisfy the customer's intended use of the product.

However, Dworkin discloses obtaining information regarding a customer's need in terms of minimum specifications of a product, column 5, lines 43 through 68. The Examiner takes official notice that it was well known in the sales art at the time of Applicant's invention to gather minimum specifications of products by asking questions regarding intended use. in lieu of asking questions regarding technical specifications, particularly in the case of a less sophisticated

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customer (e.g., asking the customer whether a printer was to be used as a high capacity printer for business purposes or as a low capacity printer for home purposes in lieu of asking whether a laser or ink jet printer was desired).

The Examiner takes official notice that it was well known in the art at the time to assign a value to each factor or feature of a configuration depending on the importance of the factor or feature to the customer. It would have been obvious to one of ordinary skill in the art at the time to assign such a value to each intended use when soliciting requirements in the form of intended uses within the Dworkin system in order to be able to determine the most important requirements of the customer.

Dworkin does not explicitly disclose

identifying from the inventory of the selling entity, using the stored inventory information, one or more available products which exactly corresponds to the configured product when an identified available product that exactly corresponds to the configured product is not found in the stored inventory information, identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product based upon a combination of values associated with the user-selectable options.

However, Joseph discloses a computer based system for identifying from the inventory of the selling entity, using the stored inventory information, one or more available products which exactly corresponds to the configured product when an identified available product that exactly corresponds to the configured product is not found in the stored inventory information,

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identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product (i.e. determining the availability of the requested item, determining alternative items for the requested item if the requested item is unavailable and determining alternative items for the requested items that are available)(col. 2, lines 28-43).

Furthermore, Joseph discloses identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product based upon a combination of values associated with the user-selectable options (i.e. categorized by price and product description)(col. 5, lines 1-41). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the teachings of Joseph within the Dworkin system for the motivation of permitting customers an alternative to out of stock product selections to avoid customer dissatisfaction (col. 1, lines 35-40).

Dworkin does not explicitly disclose

- a list of user selectable options

- wherein the interactively selecting one or more user-selectable options comprises:

- identifying the product option interactively selected;

- retrieving the configuration rules associated with the selected product option;

- applying the configuration rules to the configurable product; and

- altering the list of user-selectable options used to interactively configure a product based upon the configuration rules and the inventory available.

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However, Bennett discloses a computer implemented method for a user generating a product configuration including item constraints (see abstract). Bennett discloses displaying and interactively selecting product options from a list of user selectable options (i.e. the knowledge based configuration system has a catalog of parts and components which implement those functions. Order lines include additional or optional features requested by the customer)(col. 4, lines 4-16, col. 11, lines 1-11). Bennett also discloses identifying the product option interactively selected (i.e. order lines)(col. 11, lines 1-16). Bennett further discloses retrieving the configuration rules associated with the selected product option and applying the configuration rules to the configurable product (i.e. the configuration system applies the assembly constraints during configuration checking)(col. 4, lines 4-16, col. 11, lines 26-34). Finally, Bennett discloses altering the list of user-selectable options used to interactively configure a product based upon the configuration rules and the inventory available (i.e. the configuration system warns the user or modifies the given set of components to insure compliance with the assembly constraints)(col. 4, lines 12-16, col. 24, lines 28-45 and col. 27, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the features associated with interactively selecting product options within the Dworkin, SFA and Joseph combination in order to fill a customers needs in an efficient manner by flexibly assembling a product to match a customer's needs (col. 1, lines 21-24).

e. With respect to claim 10, Dworkin discloses

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a computer system implemented method for facilitating a sale of a product from an inventory of a selling entity, the computer system including a memory arrangement and at least one processing unit coupled to the memory arrangement; column 3, lines 48 through 64; the method comprising the steps of:

storing in the memory arrangement product inventory information related to the inventory of the selling entity; column 3, lines 60 through 66 and column 7, lines 54 through 61.

Dworkin does not explicitly disclose

storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity; column 5, lines 52 through 62.

However, SFA discloses storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity (i.e. online marketing encyclopedia) (page 3, lines 4-6 and lines 18-23). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity as disclosed by SFA within the system disclosed by Dworkin in order to permit salespeople to configure products to suit the buyers' needs in an efficient manner and maximize the salesperson's time with the customer thereby increasing profitability (abstract and page 1, line 43 - page 2, line 4).

Dworkin does not explicitly disclose

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presenting product options to a user of the computer system for selection by the user to define a configured product which satisfies the customer's needs using the stored configuration information to constrain selection of the product options.

However, SFA discloses an automated system (i.e. GM PROSPEC) to configure products to suit buyers' needs(see abstract and page 1). SFA discloses presenting product options to a user of the computer system for selection by the user to define a configured product which satisfies the customer's needs using the stored configuration information to constrain selection of the product options (i.e. product configurator) (page 3, lines 7-11 and lines 24-29). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include storing in the memory arrangement configuration information related to selling entity products offered for sale by the selling entity and presenting product options to a user of the computer system for selection by the user to define a configured product which satisfies the customer's needs using the stored configuration information to constrain selection of the product options as disclosed by SFA within the system disclosed by Dworkin in order to permit salespeople to configure products to suit the buyers' needs in an efficient manner and maximize the salesperson's time with the customer thereby increasing profitability (abstract and page 1, line 43 - page 2, line 4).

Neither Dworkin nor SFA explicitly disclose

obtaining information regarding a customer's intended uses of a product to be purchased;

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assigning a corresponding value to each of the customer's uses depending on an importance of the use to the customer; and

identifying, using the stored inventory information and the obtained information regarding the customer's intended uses and corresponding value, one or more products which are in the available inventory of the selling entity and which most closely satisfy the customer's intended use of the product.

However, Dworkin discloses obtaining information regarding a customer's need in terms of minimum specifications of a product, column 5, lines 43 through 68. The Examiner takes official notice that it was well known in the sales art at the time of Applicant's invention to gather minimum specifications of products by asking questions regarding intended use. in lieu of asking questions regarding technical specifications, particularly in the case of a less sophisticated customer (e.g., asking the customer whether a printer was to be used as a high capacity printer for business purposes or as a low capacity printer for home purposes in lieu of asking whether a laser or ink jet printer was desired).

The Examiner takes official notice that it was well known in the art at the time to assign a value to each factor or feature of a configuration depending on the importance of the factor or feature to the customer. It would have been obvious to one of ordinary skill in the art at the time to assign such a value to each intended use when soliciting requirements in the form of intended uses within the Dworkin system in order to be able to determine the most important requirements of the customer.

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Dworkin discloses using a set of specifications to identify products available in inventory. Column 6, lines 11 through 15. Once the most important specifications or features had been identified as described in the preceding paragraphs, it would have been obvious to one of ordinary skill in the art at the time to use those specifications to identify products available in inventory within the Dworkin method because otherwise gathering the specifications would have been pointless. It would further have been obvious to one of ordinary skill in the art at the time to rank the identified products based on the degree to which each corresponded to the customer's highest ranked intended uses of the product within the Dworkin method because doing so would allow a less technically sophisticated customer to select the most useful product without understanding the relative importance of all of the product configuration options.

Dworkin does not explicitly disclose

identifying from the inventory of the selling entity, using the stored inventory information, one or more available products which exactly corresponds to the configured product when an identified available product that exactly corresponds to the configured product is not found in the stored inventory information, identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product based upon a combination of values associated with the user-selectable options.

However, Joseph discloses a computer based system for identifying from the inventory of the selling entity, using the stored inventory information, one or more available products which exactly corresponds to the configured product when an identified available product that exactly

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corresponds to the configured product is not found in the stored inventory information, identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product (i.e. determining the availability of the requested item, determining alternative items for the requested item if the requested item is unavailable and determining alternative items for the requested items that are available)(col. 2, lines 28-43).

Furthermore, Joseph discloses identifying one or more products that most closely correspond to the configured product and that corresponds to the configured product based upon a combination of values associated with the user-selectable options (i.e. categorized by price and product description)(col. 5, lines 1-41). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the teachings of Joseph within the Dworkin and SFA combination for the motivation of permitting customers an alternative to out of stock product selections to avoid customer dissatisfaction (col. 1, lines 35-40).

Dworkin does not explicitly disclose

- a list of user selectable options

- wherein the interactively selecting one or more user-selectable options comprises:

- identifying the product option interactively selected;

- retrieving the configuration rules associated with the selected product option;

- applying the configuration rules to the configurable product; and

- altering the list of user-selectable options used to interactively configure a product based upon the configuration rules and the inventory available.

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However, Bennett discloses a computer implemented method for a user generating a product configuration including item constraints (see abstract). Bennett discloses displaying and interactively selecting product options from a list of user selectable options (i.e. the knowledge based configuration system has a catalog of parts and components which implement those functions. Order lines include additional or optional features requested by the customer)(col. 4, lines 4-16, col. 11, lines 1-11). Bennett also discloses identifying the product option interactively selected (i.e. order lines)(col. 11, lines 1-16). Bennett further discloses retrieving the configuration rules associated with the selected product option and applying the configuration rules to the configurable product (i.e. the configuration system applies the assembly constraints during configuration checking)(col. 4, lines 4-16, col. 11, lines 26-34). Finally, Bennett discloses altering the list of user-selectable options used to interactively configure a product based upon the configuration rules and the inventory available (i.e. the configuration system warns the user or modifies the given set of components to insure compliance with the assembly constraints)(col. 4, lines 12-16, col. 24, lines 28-45 and col. 27, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include the features associated with interactively selecting product options within the Dworkin, SFA and Joseph combination in order to fill a customers needs in an efficient manner by flexibly assembling a product to match a customer's needs (col. 1, lines 21-24).

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9. Claims 3-7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dworkin, SFA, Joseph and Bennett as applied to claim 1 above, and further in view of Lynch et al, Pat. No. 5,708,798 (hereinafter Lynch).

a. With respect to claim 3, Dworkin, SFA, Joseph and Bennett do not explicitly disclose

a method as recited in claim 1, wherein the stored configuration information comprises a plurality of configuration rules which define relationships between two of more product options.

However, Lynch discloses a computer based system that configures computer systems (see abstract). Lynch discloses configuring the system based on constraint rules that identify relationships between product options (col. 10, lines 11-27). It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include a method as recited in claim 1, wherein the stored configuration information comprises a plurality of configuration rules which define relationships between two of more product options within the Dworkin/SFA/Joseph/Bennett combination in order ease the burden of configuring complex customized systems (col. 1, lines 25-28).

b. With respect to claim 4, Dworkin, SFA, Joseph and Bennett do not explicitly disclose

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a method as recited in claim 3, wherein the configuration rules comprises a plurality of logic rules.

However, Lynch discloses a method as recited in claim 3, wherein the configuration rules comprises a plurality of logic rules (col. 10, lines 11-27). Combining Dworkin/SFA/Joseph/Bennett with Lynch would yield a product that would allow customers both to construct custom products, as in SFA and Lynch, and to search for products matching or almost matching their specifications, with a view to finding an attractive price on a product available in inventory, as in Dworkin. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include a method as recited in claim 3, wherein the configuration rules comprises a plurality of logic rules within the Dworkin/SFA/Joseph/Bennett combination in order ease the burden of configuring complex customized systems (col. 1, lines 25-28).

c. With respect to claim 5, Dworkin, SFA, Joseph and Bennett do not explicitly disclose

A method as recited in claim 3, wherein the configuration rules comprise constraint rules which define engineering relationships between product options.

However, Lynch discloses a method as recited in claim 3, wherein the configuration rules comprise constraint rules which define engineering relationships between product options (col. 10, lines 11-27). Combining Dworkin/SFA/Bennett with Lynch would yield a product that would

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allow customers both to construct custom products, as in SFA and Lynch, and to search for products matching or almost matching their specifications, with a view to finding an attractive price on a product available in inventory, as in Dworkin. It would have been obvious to one of ordinary skill a method as recited in claim 3, wherein the configuration rules comprise constraint rules which define engineering relationships between product options in the art at the time of Applicant's invention to include within the Dworkin/SFA/Joseph/Bennett combination in order ease the burden of configuring complex customized systems (col. 1, lines 25-28).

d. With respect to claim 6, Dworkin, SFA, Joseph, and Bennett do not explicitly disclose

a method as recited in claim 3, wherein the configuration rules comprise resource rules which define relationships between product options in terms of resources used and resources required.

However, Lynch discloses a method as recited in claim 3, wherein the configuration rules comprise resource rules which define relationships between product options in terms of resources used and resources required (col. 10, lines 11-27). Combining Dworkin/SFA/Joseph/Bennett with Lynch would yield a product that would allow customers both to construct custom products, as in SFA and Lynch, and to search for products matching or almost matching their specifications, with a view to finding an attractive price on a product available in inventory, as in Dworkin. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include

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a method as recited in claim 3, wherein the configuration rules comprise resource rules which define relationships between product options in terms of resources used and resources required within the Dworkin/SFA/Joseph/Bennett combination in order ease the burden of configuring complex customized systems (col. 1, lines 25-28).

e. With respect to claim 7, Dworkin, SFA, Joseph and Bennett do not explicitly disclose

a method as recited in claim 3, wherein the configuration rules comprise cross-reference rules which define relationships between similar product options .

However, Lynch discloses a method as recited in claim 3, wherein the configuration rules comprise cross-reference rules which define relationships between similar product options (col. 10, lines 11-27 and col. 13, lines 33-57). Combining Dworkin/SFA/Joseph/Bennett with Lynch would yield a product that would allow customers both to construct custom products, as in SFA and Lynch, and to search for products matching or almost matching their specifications, with a view to finding an attractive price on a product available in inventory, as in Dworkin. It would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to include a method as recited in claim 3, wherein the configuration rules comprise cross-reference rules which define relationships between similar product options within the Dworkin/SFA/Joseph/Bennett combination in order ease the burden of configuring complex customized systems (col. 1, lines 25-28).

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Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alexander Kalinowski, whose telephone number is (703) 305-2398. The examiner can normally be reached on Monday to Thursday from 9:00 AM to 6:30 PM. In addition, the examiner can be reached on alternate Fridays.

If any attempt to reach the examiner by telephone is unsuccessful, the examiner's supervisor, Joseph Thomas, can be reached on (703) 305-9588. The fax telephone number for this group is (703) 305-7687 (for official communications including After Final communications labeled "Box AF").

Hand delivered responses should be brought to Crystal Park 5, 2451 Crystal Drive, Arlington, VA, 7th Floor, receptionist.



Alexander Kalinowski

Patent Examiner

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June 30, 2003